

Demographic and Health Survey

Entry Guidelines – DHS 6

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DATA ENTRY GUIDELINES

This guide explains the responsibilities of a data entry operator for processing a DHS (Demographic Health Survey). As questionnaires for a cluster are returned from the field, they will be screened by the questionnaire administrator and office coder/editor. Once they have completed their task, they will turn the cluster over to the data entry supervisor, who will assign it to an operator for keying.

1. GENERAL GUIDELINES FOR DATA ENTRY

The data entry for the DHS will be conducted using the software package CSPro. CSPro is an interactive data entry system that can check for acceptable codes for questions, follow skips and filters in the questionnaire and check the consistency of data as they are entered. The DHS questionnaires will be entered by cluster, with each cluster being assigned to one data entry operator. The data for each cluster will be entered into a separate data file for that cluster on the hard disk of the operator's computer, rather than into one large data file. This is to protect against a major loss of data due to hardware or software failure.

During data entry it is important to remember that speed of data entry is not important but **accuracy** of entry is important. CSPro is like a computer-aided office editor. It will not allow any values to be entered that it thinks are out of range. It will skip to the next question that it believes is the next to be entered. It will present a new screen when it thinks a new screen is necessary. CSPro does these things according to the data entered. It cannot check everything that the operator enters. If an operator enters a value that was not recorded on the questionnaire, but is a value that is within range, CSPro will go to the next field that this value demands. Each operator must review what they have entered as they are entering data to ensure that mistakes do not occur.

Because CSPro will control which question is the next to be entered, it is important for the operator to watch the screen, to see which field CSPro expects to be entered next. Operators should not enter data with their heads down, only reading the questionnaire. This will lead to many errors in the data entered if the operator miskeys any data or if there are any mistakes in the responses recorded on the questionnaire. At a minimum, the operator should look at the screen every time a page is turned in the questionnaire.

Data are recorded on the questionnaire in two ways: (1) codes are circled or (2) numbers are written in boxes. Some questions allow the response to be in either of the two forms or in a combination of the two forms. For example, Q104 uses circled codes, Q106 uses codes written in boxes, Q102 uses either codes written in boxes or circled codes, and Q220 uses a circled code followed by a code written in boxes.

During data entry, if the operator finds that there are data in the questionnaire which CSPro is passing over, or that CSPro is stopping for data on a question for which nothing was written in the questionnaire, then the operator should review all of the data entered to ensure that s/he has not entered a wrong value in one of the previous questions. When reviewing the data entered, check backwards question-by-question as to whether the data entered is the same as the response written on the questionnaire. Do not just look at the last few questions, but rather, look back over the entire page and the preceding page(s) as necessary to ensure that no typing error was made in an earlier question.

If there was no mistake by the operator in entering data then s/he should ask the data entry supervisor to resolve the problem. If the supervisor is unable to resolve the problem, then the problem should be shown to the senior survey staff for resolution.

During data entry, messages may be produced which will require attention and correction to the data entered. Operators should **read the message carefully** before attempting to resolve the problem. Resolve the problem in the same way as before, reviewing the data entered first to check that no entry error was made. If no entry error occurred, then ask the supervisor to resolve the problem. The supervisor will have a manual containing a list of messages and methods to resolve the problem.

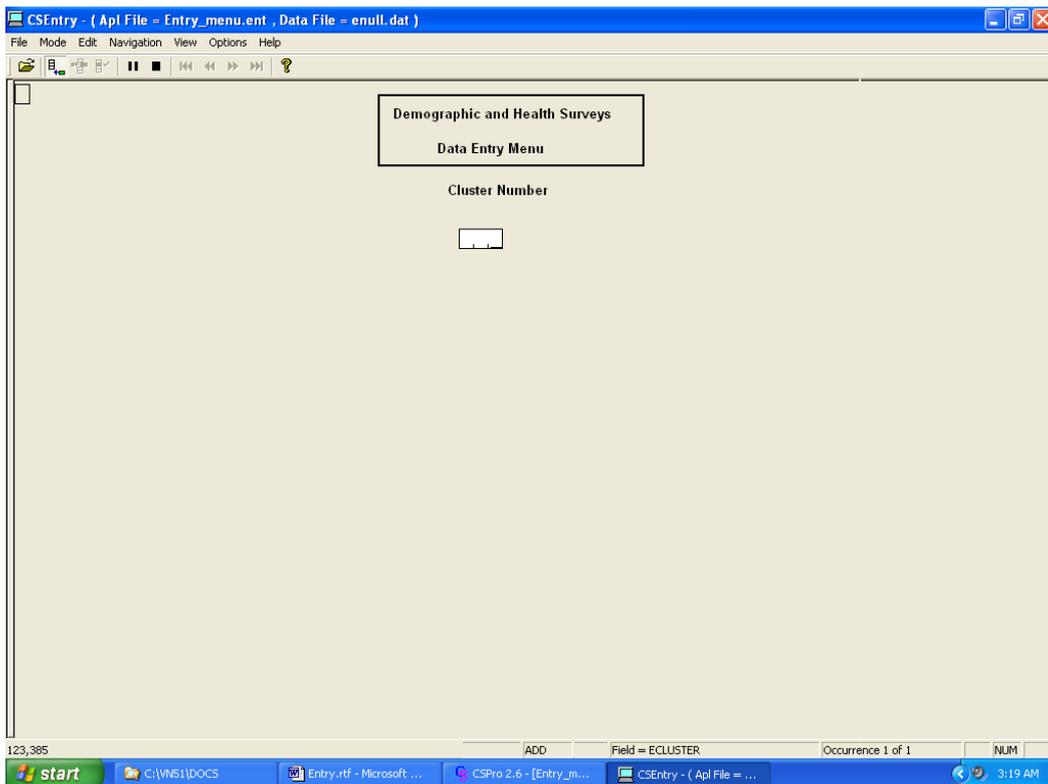
During data entry, keep all questionnaires in a tidy stack. Once a questionnaire has been entered, turn the questionnaire over face down onto a second stack. The questionnaires should be kept in numeric order by household at all times, and within households the individual questionnaires should be kept in order according to the line number of the respondent. At the end of data entry for a cluster, re-bundle the stack of questionnaires with the cluster control sheet on top and pass the cluster to the supervisor, who will then assign a new cluster for entry.

2. STARTING DATA ENTRY

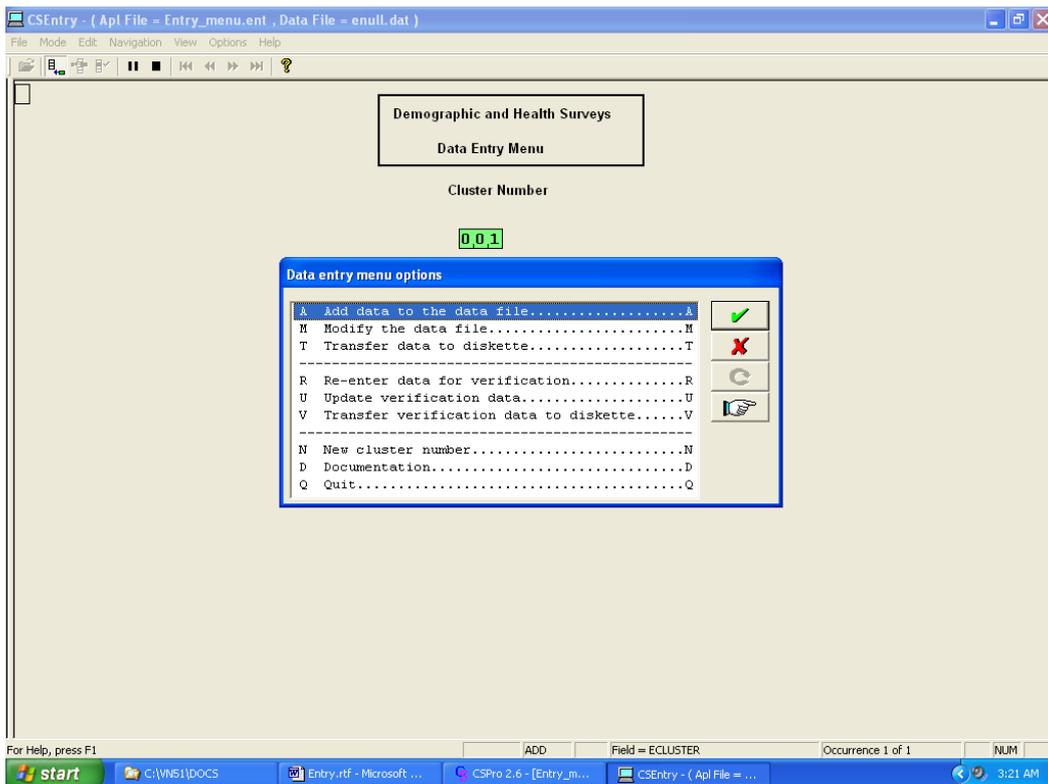
a) Data Entry Menus

To start the CSPro data entry menu:

- Make sure your computer is on and the Windows desktop is displayed.
- Click the *DHS data entry icon* on the Windows desktop. At this point all files required by the data entry program will be transferred from the supervisor's computer to the data entry operator's computer. It also transfers the control and the sample files. This is necessary to ensure that the data entry machine has the latest versions of the applications. This is particularly important during early stages of the data entry operation, when adjustments to the entry application are being made.
- The following screen will appear, requesting a cluster number to be entered. The data entry menu uses the control file to determine whether the cluster is valid. If the cluster is not part of the survey sample, the program will not allow the data entry operator to proceed.



After typing a valid cluster number, the Data Entry menu screen shown below will appear.



The menu shown above gives the following options:

A Add data to the data file. This option is used to enter data for the first time (or for "main entry" as written on the Cluster Control Sheet). The data is stored in the \DATA directory on the data entry machine. After choosing this option the system will check if the cluster has been assigned for main entry by the data processing supervisor. If it has not been assigned, the operator must ask the supervisor to assign it.

M Modify the data file. This option allows corrections to be made to questionnaires already entered into the "Main" data file. The option will be valid only if it has already been assigned for main data entry and it was keyed on the same computer where corrections are being attempted.

T Transfer data to diskette. This option allows the transfer of main data from the data entry machine to a diskette once a cluster has been entered. Normally, each cluster's data file is automatically copied to the supervisor's machine at the end of every data entry session. This option is intended as a backup for when the network is down or when there is no network available for the data processing operation.

R Re-enter data for verification. This option is used to enter data that are being verified (i.e., entered) for the second time. It is identical to option A, except that a different data file is being used for the questionnaires. The data is stored in the \VERI directory on the data entry machine. After choosing this option the system will check that the cluster has not been keyed on this machine for main entry, and that the cluster has been assigned for verification by the data processing supervisor. If it has not been assigned, the operator must ask the supervisor to assign it.

After exiting the data entry application either from main entry or verification, the system will transfer the data from the data entry machine to the supervisor's machine. If the data entry operator was entering data to the main data file, the cluster file will be copied from directory \DATA in the data entry computer to directory \DATA in the supervisor machine. If the data entry operator was verifying data the cluster file will be copied from directory \VERI in the data entry computer to directory \VERI in the supervisor machine. These copies are made for either add or modify mode.

U Update verification data. This option is used to modify the verification data entered with option R. It is identical to option M, except that it uses the verification data file. The option will be valid only if it has already been assigned for verification and it was keyed on the same computer where corrections are being attempted.

V Transfer verification data to diskette. This option allows the verification data from the data entry machine to be transferred to a diskette once a cluster has been entered for verification. This option is intended as a backup for when the network is down or when no network is available for the data processing operation.

N New cluster number. This option will be used to change or correct the cluster number that is currently being processed. When data entry for a cluster has been completed, this option is used to change to a new cluster number.

D Review documentation. This option will display this document on the screen and allow the data entry operator to browse through it.

To begin entering data, press **option A** for main (i.e., initial) entry, or **option R** for verification. The first data entry screen will be displayed.

Press the Num Lock key by the numeric keypad to the right of the keyboard so that the Num Lock light is shining (if a light exists). This will permit the use of the numeric keypad for the entry of data. The numeric keypad should be used for all numeric data responses. The alphabetic keys will **only** be used to enter textual responses specified with the category "Other" and for the questions with alphabetic codes. During data entry, enter the values shown on the questionnaire including all leading zeros.

a) Household Schedule Cover Sheet

Each screen has been laid out as close as possible to the original pages of the questionnaire, with the exception that the question text and response categories are not repeated on the screen. Therefore, on the first screen you will enter the following information:

- Domain (QHDOMAIN)
- Province (QHPROV)
- District (QHDIST)
- Commune (QHCOM)
- Village (QHVILL)
- Cluster Number (QHCLUST)
- Household Number (QHNUMBER)

The program will automatically advance from one field to the next field when a field is full; it is not necessary to press ENTER after entering each field. A field is considered "full" if the entire field width has values typed into it. For example, the cluster number is a three-digit field. If this was cluster 1, then typing '1' would not automatically advance to the household number field, as the full number of digits expected (three) was not entered. However, if '001' was typed, thereby completely filling all the boxes for this item, then the cursor would automatically advance to the next field.

After the Cluster Number and Household Number codes have been entered the program will check to see if this household has already been entered in the current data file. If it has not, then it will allow you to continue with the following fields:

- Day (QHINTD)
- Month (QHINTM)
- Year of Interview (QHINTY)
- Interviewer Number (QHINTNUM)
- Result Code (QHRESULT)

If the result code is 1 (completed), then the following fields will be keyed:

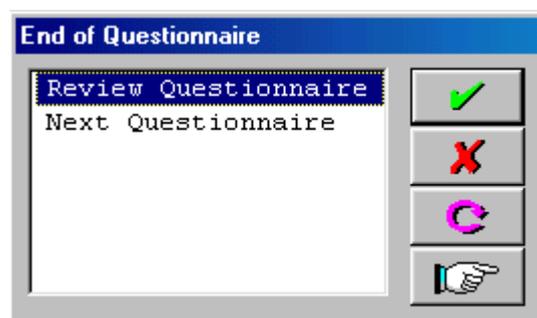
- Total Number of Visits (QHVISITS)
- Total persons in Household (QHMEMBER)
- Total Eligible Women (QHWOMEN)
- Total Eligible Men (QHMEN)
- Line Number of Respondent to the household questionnaire (QHRESP)

However, if the result code is **not** 1, then the program will skip the above fields. Finally, the fields along the bottom of the cover sheet will be entered:

- Supervisor (QHSUPER)
- Field Editor (QHFEDIT)
- Office Editor (QHOEDIT)
- Keyer (QHKEYER)

The Keyer code is the operator code assigned to each operator. If you are entering data into the “Main” data file, you should write your assigned code on each questionnaire. If you are verifying data, only enter your keyer code, but do not write it on the questionnaire.

⇒ If the result code was not 1 then that is all that will be entered for that questionnaire and CSPro will display the following dialog:



First check that there are no more data to enter for the questionnaire before continuing. By typing the letter R (Review Questionnaire) the data entered can be reviewed and corrections made, if necessary. If the letter N (Next Questionnaire) is selected, CSPro will then show a new household cover sheet for the next household questionnaire. Only continue with the next questionnaire after checking each of the fields to ensure that they are correct.

⇒ If the result code was 1 then CSPro will show the next screen for the household members and give the line numbers of each of the household members that it is expecting to be entered.

b) Household Schedule

Check that the number of lines with line numbers on the screen is the same as the number of lines completed on the questionnaire. The number should match the ‘Total Persons in Household’ (QHMEMBER) box on the front page of the household questionnaire.

Enter each member in order, entering data across the lines. When the eligibility column (column QH09) is reached, enter the number from that column if it has been circled, but otherwise enter 00 if it has not been circled (CSPro will automatically put 00 in for persons who are not eligible in most cases). Column QH10 is another column for eligibility. Column

QH11 will be used to indicate the eligibility of children 0-5 years of age. Continue entering the members until all members have been entered. After entering the last data for the last member, CSPro will present a similar screen to the "End of Questionnaire" screen shown above. Check all of the entries on the page to ensure that they have been entered correctly, and then select the letter R to review or correct data on the schedule, or the letter N to proceed to the next section.

After completing the Household Schedule, information on injured or killed members of the household during the past 12 months is required. The number of columns CSPro expects to be filled in this section is determined by QH50N and the order of persons by their line number in the household schedule (QH01).

Information on each person of the household who is physical impaired is entered in the next section. The number of columns CSPro expects to be filled is determined by QH59N and members should be listed in the same order as in the household schedule (QH01).

Likewise, additional information on sick people over the past 30 days is entered subsequently. The number of columns CSPro expects to be filled for this section is determined by QH65N and the order is the same as in the household schedule (QH01). Next section to be completed is related to the characteristics of the household.

When at least one entry in column QH11 was circled, CSPro will display a screen to enter the height, weight and hemoglobin section for children 0-5. All children identified in QH11 have to be entered in the order in which they are listed in the household schedule. If there are no eligible children in the household, this section will not be displayed.

After completing the height and weight section for children, CSPro expects all women identified in QH09 to be entered in height, weight and hemoglobin section. They should be entered in the order listed in the household schedule. Again, if there are no eligible women in the household, this section will not be displayed.

After the height, weight and hemoglobin sections are entered, CSPro is ready to receive individual questionnaires, if there are eligible respondents.

If there are no eligible women and no eligible men in the household, then CSPro will present the screen for the next household questionnaire. However, if there are eligible women or eligible men, CSPro will display the screen for the Individual questionnaire cover sheet. If the household cover sheet is shown and there are individual questionnaires to be entered, ask the supervisor for assistance in resolving the problem.

c) Individual Questionnaire Cover Sheet

When the Individual questionnaire cover sheet is displayed all the geographical variables related to the cluster will be pre-populated and displayed. Check that each of these is correct before continuing, and then enter the 'line number of the woman or man' (QLINE). Individual questionnaires must be entered in numerical order according to line number. Next enter the remaining fields on the Individual questionnaire cover sheet.

If the result code was not 1 then that is all that will be entered for that individual questionnaire. CSPro will again display a screen, asking for the data to be reviewed or to continue with the next questionnaire. Only continue after checking that each entry on the page is correctly entered.

d) Individual Questionnaire

Continue entering data in the same manner for each of the questions in the questionnaire, verifying that the correct path is being followed at all times and that no fields are being skipped that have data in the questionnaire. Throughout the entry of the questionnaire, ensure that the data on the questionnaire is the same as the data entered. Do not sacrifice accuracy of entry for speed of entry. It is more important that the data are correct than to key data quickly but with mistakes.

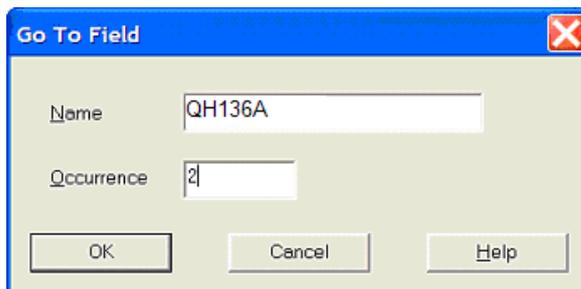
At the very end of the questionnaire, CSPro will again display a screen allowing the data entered to be reviewed or to continue with the next questionnaire. Only continue after checking that the data entered are correct.

After an individual questionnaire is complete, CSPro will display the cover sheet screen for another individual questionnaire if there are more individuals to enter for the household, or the cover sheet for the household if the individual just entered was the last individual in the household.

3. MOVING BACK THROUGH THE DATA

If a mistake is made during data entry then it is possible to go back and correct the mistake before the end of the questionnaire. It is possible to go back to questions on previous screens as well as to questions on the current screen. There are three ways of going back to earlier questions:

- a) Clicking on the field with the left mouse button.
- b) Pressing the up arrow (↑) or Shift+Tab keys simultaneously to move back one field at a time.
- c) Pressing the function key F6 (GoTo) will display a dialog as the following:



Enter the name of the variable and then click OK to go to that field. If the field is part of a repeating section, then an occurrence number can be given in the lower half. Click OK when ready.

In order to use the function key F6, it is necessary to know the names of the variables. Variable names in the household questionnaire are based on question numbers preceded by the letters 'QH'. Variable names in the woman questionnaire are based on question numbers preceded by the letter Q. For the male questionnaire questions are preceded by the letters 'QM'. In all questionnaires variables sometimes have a suffix attached if there is more than one field for the question. Generally the letter after the question number will follow the pattern A, B, C, D... although there are some exceptions:

- If the question asks for hours and minutes then the two parts are suffixed H and M (for example, Q101H and Q101M).
- If the question asks for months and years then the two parts are suffixed M and Y (for example, Q106M and Q106Y).

- If the question asks for units and numbers then the two parts are suffixed U and N (for example, Q220U and Q220N).

A list of all variable names is available with the data entry supervisor. Names of variables in the household and the individual questionnaires cover sheet are given by name (as mentioned in the bulleted sections above for section 2.a).

4. CORRECTING DATA

If a mistake has been made in the middle of entering data into a numeric field, pressing the Space bar can erase the information already entered in that field. For example, if code 01 was to be entered for Q106M but the 2 was pressed first then the whole field can be erased by pressing the SPACE bar. The corrected data can then be entered into the field. The Backspace and Del keys cannot be used to correct data entered in numeric fields.

If a previously-entered numeric field contains a mistake, the correct data can be entered "over top" of this previously-entered data. However, if the operator is not sure, s/he should use the SPACE bar to empty the field before entering the data.

When correcting data in alphabetic fields, the Backspace, Del and Insert keys **can** be used. The Space bar may be used to enter a single blank character in these fields, but it does not completely blank out the field.

5. MOVING FORWARD THROUGH THE DATA

Having moved back through the data to an earlier field, there are three ways of moving forward again.

- a) Pressing the down arrow key (↓), enter or Tab keys one field at a time until the required field is reached.
- b) Using the function key F6 (GoTo) as described in section 3.
- c) If it is desired to move to the last variable entered in the questionnaire, press F10 (Advance to end). It is not possible to move forward further than the last variable entered, so CSPro will advance only as far as the last field entered.

6. SKIP ERRORS AND MISSING DATA

CSPro is programmed to allow entry only for those questions that should be keyed. As the response for each question is entered, the operator creates a data path through the questionnaire. Certain responses are used to help control this path. For example, prior to entering the household schedule, the data entry operator will be asked to enter the total number of persons in the household. This field is then used to control the entry of the household schedule. Similarly, the total number of eligible women and men is used to control the number of individual questionnaires entered for the current household.

In the individual questionnaire there are also responses to questions that control the data path. For example, each child's year of birth in the woman's birth history is used to control whether the child should be included in the health section of the questionnaire. Any field that determines a skip is also controlling the data path.

If the fields that control the data path are miskeyed, the data entry operator may be asked to enter data for which responses do not exist on the questionnaire, or similarly may not be allowed to enter data for which responses do exist on the questionnaire. This is because the data entry operator is following an incorrect data path. If this occurs, the operator should return to the "control" field that determined the skip and correct the entry for that field.

Occasionally a skip error will exist in a questionnaire. If a woman has reported YES according to question Q216, but the following question records no answer, the interviewer has committed a skip error. However, an operator should never assume that the previous keying has all been correct and that the error is in the questionnaire. The operator should check that the code recorded in question Q216 has been properly entered.

In general, if a skip error is found in the questionnaire and data are missing, the operator records a special code indicating missing data. For numeric fields, this code is a field full of 9s. For alphabetic fields, this is a single question mark "?" recorded in the first position of the field. Any corrections made during data entry should be written into the questionnaire with a purple pen. This is done to distinguish between writing made in the office (orange pen), the interviewer's work (blue pen), and the field supervisor's work (red pen).

However, when a question is left unanswered **and** the question affects the data path, it is sometimes possible to ascertain what the correct response should be. In other words, if there is information to a subsequent question which could only have been reached by one possible response to the controlling question, then that response should be recorded for the question. For example, if question Q226 was left unanswered, but a response was recorded for questions Q227 and Q228, then code 1 should be circled for question Q226, as it is the only code that will lead to question Q227. On the other hand, if Q226 was left blank and there is no data recorded until question Q229, then it would seem that the interviewer forgot to circle a response for Q226. However, since it isn't known what the correct response should be (a "no" or "don't know"), a missing code (9) should be used in this situation for Q226.

It is a good habit to review other responses prior to the field that is identified as giving an error. Occasionally a data entry operator can be "off" by one field and enter many erroneous responses without the errors being detected. This can often happen in sections of the questionnaire that contain several Yes/No questions, e.g. Q301 and Q558. It is essential for operators to review earlier sections of the questionnaire when an incorrect data path appears to have been followed. If an operator is unsure of the problem, s/he should never hesitate to call a supervisor for help.

Operators should make certain that they enter the responses found in the questionnaire and not create responses in order to satisfy CSPro's demand for a response. A supervisor should always be consulted for those cases where serious skip errors are found in a questionnaire.

7. DATA PATH

CSPro remembers the current data path at all times and shows all values that are on the current path in green. When moving back through the data, CSPro will change the fields after the current field to white. If a correction to an earlier field changes the flow of questions ("data path") such that a previously-keyed field with data in it is bypassed, then this field will become gray. At the end of entry of a questionnaire only those fields that are green are written to the data file; any fields that are not on the correct path are not written to the data file.

The reason for explaining this is that if a mistake is made such that data are entered on the wrong path, when you correct the responses to get back on-path, it is not necessary to go back to those now off-path fields and blank out the values entered, because CSPro does not save off-path data.

8. QUESTION DETAILS

a) Alphabetic code fields

There are several fields that have alphabetic codes for the responses and these are either circled or not. Enter all of the codes that are circled for the question and then press the ENTER key. The codes must be entered in order, with no gaps between the codes and no repetitions of the codes. Some of the questions that this applies to are Q304, Q325, Q409, Q410, etc.

b) Other answers

Each "Other" answer recorded in the questionnaire is to be recorded. When the screen for the other answer is displayed, type in the text of the response exactly as it is given on the questionnaire. Do not abbreviate the text or alter it, give as much detail as possible. After entering the text of the response, press enter to return to the data entry screen.

Note: During verification, "other" text will not be entered.

c) Decimal places

Some questions require the use of decimal places when entering the data. For example in the household questionnaire, this pertains to questions QH205, QH206 and QH212 (weight, height, and hemoglobin for children, respectively). Enter each of these fields with great care, always entering all leading zeros, as well as the decimal place. Always check the value entered immediately after entering the data. It is very easy to make mistakes on these questions. Be particularly aware of cases where the value after the decimal point is not completed; It is assumed that this value should be zero, and so it is necessary to enter the correct number of zeros to complete the field.

9. ENDING QUESTIONNAIRES

Be aware that after entry of each individual questionnaire is finished, there is no opportunity to return to that questionnaire until later in modify mode. Again this is why you should be very careful when keying, as it is not always easy to return to a previous point and make corrections. When possible, you should always check the current screen's data to the questionnaire before advancing to the next screen.

If a mistake was made but not discovered until after the questionnaire was keyed, record the cluster number, household number, individual's line number, question number (and occurrence number if part of a repeating field), with the error and ask the data entry supervisor to assist you in correcting the problem.

Individual questionnaires aren't considered finished by CSPro until the operator clicks Yes to the "Accept the questionnaire" dialog box. This will bring up the first screen for the next person if more eligible women/men exist for the household, or a new household

questionnaire screen if this was the last eligible person in the household. Note that the data for a household is saved only when all individual questionnaires pertaining to the household have been entered and a new household questionnaire screen is displayed.

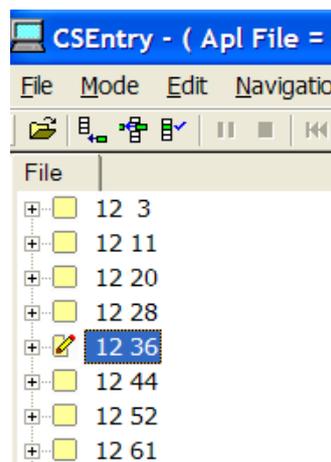
11. QUITTING DATA ENTRY/PARTIALLY SAVING CASES

If you have completed entry for an entire household questionnaire and wish to exit CSPro, you may quickly exit by pressing Alt+F4 from the first field of the (blank) household schedule screen (alternatively, you can click on the file menu and then on the exit option of drop-down the menu). Doing so will exit CSPro and return to the data entry menu. Once on the data entry menu, pressing Esc will quit the menu completely and return to Windows desktop.

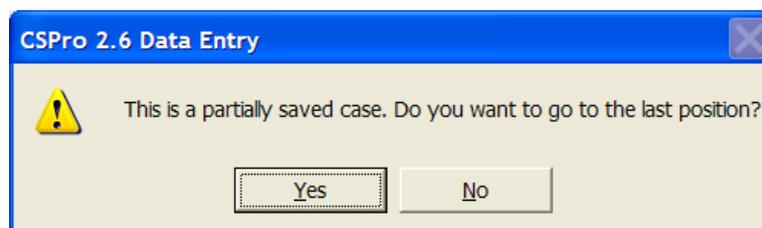
If, however, you are unable to finish keying all the questionnaires for the household before you wish to exit from CSPro, you may partially save the data. To do this, press Ctrl+S to stop entry, then select the first button, "Partial Save". You can now safely exit CSPro using the Alt+F4 keys.

Always leave the computer on the data entry menu, not in CSPro.

Note: If you leave a partial case in the data file, the next time you resume keying for the cluster, do not begin keying a new household until you have finished the partially-saved one. For example, if you were keying questionnaires for cluster 12, and had partially-saved data for household 36, a partial snapshot of your screen would be as follows:



To resume keying for household 36, double-click on that household in the tree, i.e., the one shown highlighted above. CSPro will then ask you:



You should answer yes. The system will bring you to your last keyed position.

12. STARTING A NEW CLUSTER

When a cluster of questionnaires has been finished, a new cluster will be assigned. Since each cluster's data will be stored in a different data file, the cluster number **must** be changed to reflect the new cluster assigned. Leave the data entry program by pressing the function key Alt+F4 (or go to the File menu dropdown, then choose Exit). This should only be done when the computer is displaying the household questionnaire cover sheet and awaiting entry in the first field of the screen. After ending the entry program, the data entry menu will then be displayed. Use option N to change the cluster number to the new cluster number. Press option A to commence data entry for that cluster if entering data for the first time in the "Main" data file or press option R to reenter data into the "Verification" data file.

13. CORRECTING THE DATA IN MODIFY MODE

Each cluster will be assigned to two different keyers; the first one for initial entry, and then again for rekeying, i.e., verification. After you and another keyer have entered all the questionnaires for a cluster, the Supervisor will run a program that will compare the values you entered against the other keyer's values for every single field. If there are no differences, the generated report will be clean and have no entries. If, however, there are differences, the report will list every household in which errors were found, and put the results in three columns as follows:

Column 1: Questionnaire identification fields and the internal name of the data field

Column 2: The data value keyed by the first keyer

Column 3: The data value keyed by the second keyer

The Supervisor (or assistant) must then review the questionnaires to determine where the keying error lies, with the first or the second keyer (it could be helpful in some cases to assign this task to the data entry operator that either enter the main or verified data file). Whatever way it is done, they will mark on the report the corrections to be made. The Supervisor will then return the report to the keyer(s) for correction. An example of how this listing will look like is shown below:

```
Input File:      C:\LDHS\data\C114.DAT
Reference File:  C:\LDHS\veri\V114.DAT
-----
Case Id
Item            Input File      Reference File
-----
[114 6 4]
Q230M           06              05

[114 16 ]
QH18A(5)       2               3
QH14(9)        0               4
QC41(1)        9.5            9.3
QH58A(2)       9               1
QH58B(2)       9               1
QH59(2)       99.9           17.2
QH60(3)        2               9

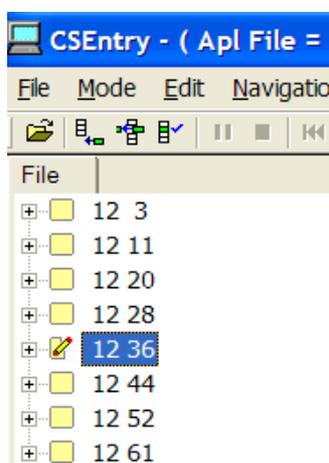
[114 16 3]
Q443(1)        E               F
Q493(10)       0               9

[114 16 4]
QM301(6)       2               1
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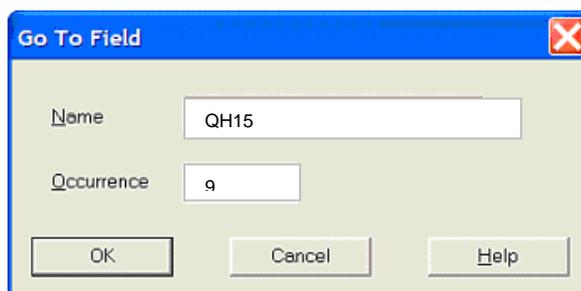
In the above example, the numbers listed in square brackets are identification fields. Normally they correspond to cluster number, household number and line number of the individual. In the example above in the first grouping of square brackets ([114 6 4]), 114 is the cluster, 6 identifies the household number and 4 corresponds to the individual line number. The lines that follow the identification brackets list the discrepancies found for that questionnaire. In our example, there is only one line and it indicates that there is a discrepancy in variable Q230M. As mentioned in section 3, variables starting with a Q and followed by a question number correspond to variables in the woman questionnaire. The next pair of square brackets ([114 6]), indicates that there are problems in cluster 114, household 16. Since there's no person number after the household number, and because the variables are named QH, it can be deduced that the list of discrepancies that follow correspond to a household questionnaire. This is yet one more reason to pay close attention when entering data, for any keying mistakes will require correction later, thereby slowing down the entire data entry operation.

13. ACCESSING THE DATA IN MODIFY MODE

After selecting option M or option U (from the data entry menu) to modify the main or verified data file, a screen as the one shown below is displayed in the data entry operator's computer:



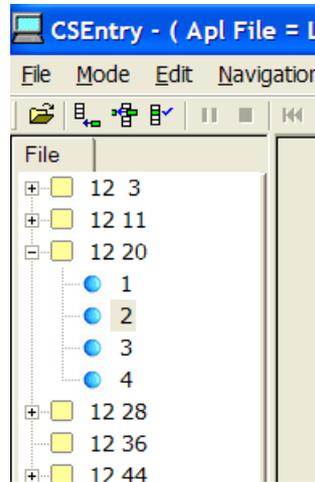
If you need to access the household questionnaire, double-click on the tree entry whose IDs match the household's IDs you're looking for. To quickly move to a specific item, press F6. This launches the "Go To" dialog box as shown below:



As can be seen above, the keyer wants to move to question QH15 in the household schedule but to the member in row 9. If the question does not repeat, just leave this second

portion blank in the dialog box. After all corrections are made to the household questionnaire, press F12 to finish modification for the household.

If you need to access the individual questionnaire, open the case in the tree by clicking on the + sign of the household where the individual is located. This expands the tree with the individual questionnaires available for that household. Once the individual questionnaires are visible, double-click on the desired line number to have the individual questionnaire available (or click once and press the enter key).



Again as in the household questionnaire, to quickly move to a specific item, press F6 to launch the "Go To" dialog box, and enter the internal name of the question. Proceed in this fashion correcting all errors for the individual. When there are no more outstanding corrections, again press F12. You must always "close-out" a questionnaire (whether household or individual questionnaire) before another one can be edit.

Selected Tips for Data Entry Operators

Numeric Fields

- "Zero fill" each field: For example, if the person's response was '4', but the field is three characters long, type in '004'. In this way the cursor will automatically advance to the next field for you.
- Missing responses: If the cursor is on a field, but that field does not have any response indicated, then key in '9's to fill the field. For example, in a three-digit field, enter '999'. However, first check the previous field(s) to ensure that the corrected values were entered.

The following fields are exceptions to the above:

- QH13 and QH15 household schedule: if this field is missing (line # of the mother/father in the household), and the Supervisor cannot determine from the household schedule the correct value, '00' will be used.
- Q506, immunization table: if any fields are blank, 0s will be used, not '9's.

Text Fields

- Responses will always be in capital letters. If there are multiple responses circled, enter them in order, i.e., 'AB', not 'BA'. Do not leave spaces or type commas or other symbols between the letters.
- Missing responses: If there is no response circled, enter a '?'. However, first check the previous field(s) to ensure that the correct value was entered.

"Other" responses

Sometimes the actual textual response needs to be entered. This normally happens in numeric fields with responses 6, 96, 996 (depending on the length of the field) or in alphabetical fields with response 'X' (or sometimes 'W'). In those cases CSPro will display a separate screen for the textual answer that appears in front of the "Other _____" response, to be entered. The first character of the text must be a letter and should not be blank. If this text is missing, write in "Missing Response".

Other Issues

If more than three children were born since 2005, supplementary woman's questionnaires should be present for record data for the children's "pregnancy and postnatal" and "immunization" sections. The cover sheet should have the household's identification codes completed and it should be marked as supplementary questionnaire. If there is more than one supplementary questionnaire for the woman, make sure you find the correct "next child"/supplementary questionnaire to enter.

"Re-interviews"—as a method of quality control in the field, the Field Supervisor may re-interview selected households. "Re-interview" should be written on the top of the household questionnaire in red pen, and the form itself should be completed in red. This

questionnaire will **not** be keyed, but it should be kept in the stack with the other questionnaires.

Navigation within CSPro

The following keys will be handy when moving around the questionnaire:

- Up arrow (↑) or Shift+Tab: to move to a previous field, **do not** use the backspace key.
- Down arrow key (↓), Tab or enter: to advance to the next field when data have been previously entered for the current field (field with focus).
- Left Mouse button: when modifying previously-entered data to move to a field previously entered. It can also be used to advance to previously populated fields after having going backward.
- F6: go to a specific field using the internal name. See section 3 to determine the field names.
- F10: Advance to the last keyed field—use this only in 'Add' mode, do not use it in 'Modify' mode. This can be handy if you had to go back and want to return to the last field keyed.